IN THE SPECIFICATION:

Please amend the paragraph at page 10, lines 10-12, as follows:

Fig. 5 is a perspective view illustrating a ~~heat~~ self-heat exchanger according to a second embodiment of implementation of the present invention.

Please amend the paragraph at page 24, line 12, to page 25, line 10, as follows:

Fig. 8 depicts the reactor according to he fourth embodiment of the present invention. This reactor performs heating in the reactor described in Fig. 7 by the catalytic reaction of reactive components contained in the fluid. This reactor is a catalytic reactor having the same configuration as the self-heat exchanger of Fig. 5 except that a catalyst (H) is supported on the entire surface of the heat transfer material (BF) or the surface thereof close to the end surface to which the fluid is forwarded so that it is integrated to the self-heat exchanger. In this reactor, the integration of a self-heat exchange structure comprising a bellows type heat transfer surface having a high heat exchange efficiency and ~~a monolithic catalyst carrier structure~~ catalyst distribution in the vicinity of the fluid forwarding space to each other makes it possible to obtain a temperature high enough to cause catalytic reaction inside the reactor without raising the temperature of the reaction fluid so much as a result (e.g., 20°C, 300°C and 50°C at D, F and D', respectively) and hence realize a high efficiency and energy-saving reaction.